



# Sequence Listing

<110> Goddard, Audrey  
Gurney, Paul J.  
Gurney, Austin L.  
Mark, Melanie R.  
Yang, Ruey-Bing

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<140> US 09/202,054

<141> 1998-12-07

<150> PCT/US98/21141

<151> 1998-10-07

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Pro Lys Thr Leu Pro Cys Asp Val Thr Leu Asp Val Pro Lys Asn  
35 40 45  
His Val Ile Val Asp Cys Thr Asp Lys His Leu Thr Glu Ile Pro  
50 55 60  
Gly Gly Ile Pro Thr Asn Thr Thr Asn Leu Thr Leu Thr Ile Asn  
65 70 75  
His Ile Pro Asp Ile Ser Pro Ala Ser Phe His Arg Leu Asp His  
80 85 90  
Leu Val Glu Ile Asp Phe Arg Cys Asn Cys Val Pro Ile Pro Leu  
95 100 105  
Gly Ser Lys Asn Asn Met Cys Ile Lys Arg Leu Gln Ile Lys Pro  
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Arg Ser Phe Ser Gly Leu Thr Tyr Leu Lys Ser Leu Tyr Leu Asp  
125 130 135  
Gly Asn Gln Leu Leu Glu Ile Pro Gln Gly Leu Pro Pro Ser Leu  
140 145 150  
Gln Leu Leu Ser Leu Glu Ala Asn Asn Ile Phe Ser Ile Arg Lys  
155 160 165  
Glu Asn Leu Thr Glu Leu Ala Asn Ile Glu Ile Leu Tyr Leu Gly  
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Gln	Asn	Cys	Tyr	Tyr	Arg	Asn	Pro	Cys	Tyr	Val	Ser	Tyr	Ser	Ile
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Glu	Lys	Asp	Ala	Phe	Leu	Asn	Leu	Thr	Lys	Leu	Lys	Val	Leu	Ser
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Leu	Lys	Asp	Asn	Asn	Val	Thr	Ala	Val	Pro	Thr	Val	Leu	Pro	Ser
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Thr	Leu	Thr	Glu	Leu	Tyr	Leu	Tyr	Asn	Asn	Met	Ile	Ala	Lys	Ile
				230					235					240
Gln	Glu	Asp	Asp	Phe	Asn	Asn	Leu	Asn	Gln	Leu	Gln	Ile	Leu	Asp
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Leu	Ser	Gly	Asn	Cys	Pro	Arg	Cys	Tyr	Asn	Ala	Pro	Phe	Pro	Cys
				260					265					270
Ala	Pro	Cys	Lys	Asn	Asn	Ser	Pro	Leu	Gln	Ile	Pro	Val	Asn	Ala
				275					280					285
Phe	Asp	Ala	Leu	Thr	Glu	Leu	Lys	Val	Leu	Arg	Leu	His	Ser	Asn
				290					295					300
Ser	Leu	Gln	His	Val	Pro	Pro	Arg	Trp	Phe	Lys	Asn	Ile	Asn	Lys
				305					310					315
Leu	Gln	Glu	Leu	Asp	Leu	Ser	Gln	Asn	Phe	Leu	Ala	Lys	Glu	Ile
				320					325					330
Gly	Asp	Ala	Lys	Phe	Leu	His	Phe	Leu	Pro	Ser	Leu	Ile	Gln	Leu
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Asp	Leu	Ser	Phe	Asn	Phe	Glu	Leu	Gln	Val	Tyr	Arg	Ala	Ser	Met
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Asn	Leu	Ser	Gln	Ala	Phe	Ser	Ser	Leu	Lys	Ser	Leu	Lys	Ile	Leu
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Arg	Ile	Arg	Gly	Tyr	Val	Phe	Lys	Glu	Leu	Lys	Ser	Phe	Asn	Leu
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Ser	Pro	Leu	His	Asn	Leu	Gln	Asn	Leu	Glu	Val	Leu	Asp	Leu	Gly
				395					400					405
Thr	Asn	Phe	Ile	Lys	Ile	Ala	Asn	Leu	Ser	Met	Phe	Lys	Gln	Phe
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Lys	Arg	Leu	Lys	Val	Ile	Asp	Leu	Ser	Val	Asn	Lys	Ile	Ser	Pro
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Ser	Gly	Asp	Ser	Ser	Glu	Val	Gly	Phe	Cys	Ser	Asn	Ala	Arg	Thr
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Ser	Val	Glu	Ser	Tyr	Glu	Pro	Gln	Val	Leu	Glu	Gln	Leu	His	Tyr
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Glu	Ala	Ser	Phe	Met	Ser	Val	Asn	Glu	Ser	Cys	Tyr	Lys	Tyr	Gly
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Asn Leu Lys Asn	Leu Ser Leu Ala Lys	Asn Gly Leu Lys Ser Phe
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Ser Trp Lys Lys	Leu Gln Cys Leu Lys	Asn Leu Glu Thr Leu Asp
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Leu Ser His Asn	Gln Leu Thr Thr Val	Pro Glu Arg Leu Ser Asn
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Arg Ser Leu Thr	Lys Tyr Phe Leu Gln	Asp Ala Phe Gln Leu Arg
740		745 750
Tyr Leu Asp Leu	Ser Ser Asn Lys Ile	Gln Met Ile Gln Lys Thr
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Ser Phe Pro Glu	Asn Val Leu Asn Asn	Leu Lys Met Leu Leu Leu
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 Ile Leu Phe Ser Leu Ser Ile Ser Val Ser Leu Phe Leu Met Val  
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 Met Met Thr Ala Ser His Leu Tyr Phe Trp Asp Val Trp Tyr Ile  
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 Tyr His Phe Cys Lys Ala Lys Ile Lys Gly Tyr Gln Arg Leu Ile  
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Ser	Arg	Ser	Tyr	Pro	Cys	Asp	Glu	Lys	Lys	Gln	Asn	Asp	Ser	Val	35	40	45	
Ile	Ala	Glu	Cys	Ser	Asn	Arg	Arg	Leu	Gln	Glu	Val	Pro	Gln	Thr	50	55	60	
Val	Gly	Lys	Tyr	Val	Thr	Glu	Leu	Asp	Leu	Ser	Asp	Asn	Phe	Ile	65	70	75	
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Lys	Ile	Asn	Leu	Asn	His	Asn	Pro	Asn	Val	Gln	His	Gln	Asn	Gly	95	100	105	
Asn	Pro	Gly	Ile	Gln	Ser	Asn	Gly	Leu	Asn	Ile	Thr	Asp	Gly	Ala	110	115	120	
Phe	Leu	Asn	Leu	Lys	Asn	Leu	Arg	Glu	Leu	Leu	Leu	Glu	Asp	Asn	125	130	135	
Gln	Leu	Pro	Gln	Ile	Pro	Ser	Gly	Leu	Pro	Glu	Ser	Leu	Thr	Glu	140	145	150	
Leu	Ser	Leu	Ile	Gln	Asn	Asn	Ile	Tyr	Asn	Ile	Thr	Lys	Glu	Gly	155	160	165	
Ile	Ser	Arg	Leu	Ile	Asn	Leu	Lys	Asn	Leu	Tyr	Leu	Ala	Trp	Asn	170	175	180	
Cys	Tyr	Phe	Asn	Lys	Val	Cys	Glu	Lys	Thr	Asn	Ile	Glu	Asp	Gly	185	190	195	
Val	Phe	Glu	Thr	Leu	Thr	Asn	Leu	Glu	Leu	Leu	Ser	Leu	Ser	Phe	200	205	210	
Asn	Ser	Leu	Ser	His	Val	Pro	Pro	Lys	Leu	Pro	Ser	Ser	Leu	Arg	215	220	225	
Lys	Leu	Phe	Leu	Ser	Asn	Thr	Gln	Ile	Lys	Tyr	Ile	Ser	Glu	Glu	230	235	240	
Asp	Phe	Lys	Gly	Leu	Ile	Asn	Leu	Thr	Leu	Leu	Asp	Leu	Ser	Gly	245	250	255	
Asn	Cys	Pro	Arg	Cys	Phe	Asn	Ala	Pro	Phe	Pro	Cys	Val	Pro	Cys	260	265	270	
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 Ala Phe Leu Thr Met Leu Pro Arg Leu Glu Ile Leu Asp Leu Ser  
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 Phe Asn Tyr Ile Lys Gly Ser Tyr Pro Gln His Ile Asn Ile Ser  
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 Arg Asn Phe Ser Lys Leu Leu Ser Leu Arg Ala Leu His Leu Arg  
 365 370 375  
 Gly Tyr Val Phe Gln Glu Leu Arg Glu Asp Asp Phe Gln Pro Leu  
 380 385 390  
 Met Gln Leu Pro Asn Leu Ser Thr Ile Asn Leu Gly Ile Asn Phe  
 395 400 405  
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 410 415 420  
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 Ala Tyr Gly Lys Ala Leu Asp Leu Ser Leu Asn Ser Ile Phe Phe  
 485 490 495  
 Ile Gly Pro Asn Gln Phe Glu Asn Leu Pro Asp Ile Ala Cys Leu  
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 Phe Ser Ala Ile Pro His Val Lys Tyr Leu Asp Leu Thr Asn Asn  
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 Arg Leu Asp Phe Asp Asn Ala Ser Ala Leu Thr Glu Leu Ser Asp  
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 Ala Gly Val Thr His His Leu Glu Phe Ile Gln Asn Phe Thr Asn  
 575 580 585  
 Leu Lys Val Leu Asn Leu Ser His Asn Asn Ile Tyr Thr Leu Thr  
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Asp Lys Tyr Asn Leu Glu Ser Lys Ser Leu Val Glu Leu Val Phe  
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 Ser Gly Asn Arg Leu Asp Ile Leu Trp Asn Asp Asp Asp Asn Arg  
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 Tyr Ile Ser Ile Phe Lys Gly Leu Lys Asn Leu Thr Arg Leu Asp  
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 Tyr Asp Thr Lys Asp Ala Ser Val Thr Asp Trp Val Ile Asn Glu  
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 Leu Arg Tyr His Leu Glu Glu Ser Arg Asp Lys Asn Val Leu Leu  
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Cys Leu Glu Glu Arg Asp Trp Asp Pro Gly Leu Ala Ile Ile Asp  
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*Adoni*

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<213> Homo sapiens

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Asp	Arg	Asn	Gly	Ile	Cys	Lys	Gly	Ser	Ser	Gly	Ser	Leu	Asn	Ser
				35					40					45

Ile	Pro	Ser	Gly	Leu	Thr	Glu	Ala	Val	Lys	Ser	Leu	Asp	Leu	Ser		50	55	60
Asn	Asn	Arg	Ile	Thr	Tyr	Ile	Ser	Asn	Ser	Asp	Leu	Gln	Arg	Cys		65	70	75
Val	Asn	Leu	Gln	Ala	Leu	Val	Leu	Thr	Ser	Asn	Gly	Ile	Asn	Thr		80	85	90
Ile	Glu	Glu	Asp	Ser	Phe	Ser	Ser	Leu	Gly	Ser	Leu	Glu	His	Leu		95	100	105
Asp	Leu	Ser	Tyr	Asn	Tyr	Leu	Ser	Asn	Leu	Ser	Ser	Ser	Trp	Phe		110	115	120
Lys	Pro	Leu	Ser	Ser	Leu	Thr	Phe	Leu	Asn	Leu	Leu	Gly	Asn	Pro		125	130	135
Tyr	Lys	Thr	Leu	Gly	Glu	Thr	Ser	Leu	Phe	Ser	His	Leu	Thr	Lys		140	145	150
Leu	Gln	Ile	Leu	Arg	Val	Gly	Asn	Met	Asp	Thr	Phe	Thr	Lys	Ile		155	160	165
Gln	Arg	Lys	Asp	Phe	Ala	Gly	Leu	Thr	Phe	Leu	Glu	Glu	Leu	Glu		170	175	180
Ile	Asp	Ala	Ser	Asp	Leu	Gln	Ser	Tyr	Glu	Pro	Lys	Ser	Leu	Lys		185	190	195
Ser	Ile	Gln	Asn	Val	Ser	His	Leu	Ile	Leu	His	Met	Lys	Gln	His		200	205	210
Ile	Leu	Leu	Leu	Glu	Ile	Phe	Val	Asp	Val	Thr	Ser	Ser	Val	Glu		215	220	225
Cys	Leu	Glu	Leu	Arg	Asp	Thr	Asp	Leu	Asp	Thr	Phe	His	Phe	Ser		230	235	240
Glu	Leu	Ser	Thr	Gly	Glu	Thr	Asn	Ser	Leu	Ile	Lys	Lys	Phe	Thr		245	250	255
Phe	Arg	Asn	Val	Lys	Ile	Thr	Asp	Glu	Ser	Leu	Phe	Gln	Val	Met		260	265	270
Lys	Leu	Leu	Asn	Gln	Ile	Ser	Gly	Leu	Leu	Glu	Leu	Glu	Phe	Asp		275	280	285
Asp	Cys	Thr	Leu	Asn	Gly	Val	Gly	Asn	Phe	Arg	Ala	Ser	Asp	Asn		290	295	300
Asp	Arg	Val	Ile	Asp	Pro	Gly	Lys	Val	Glu	Thr	Leu	Thr	Ile	Arg		305	310	315
Arg	Leu	His	Ile	Pro	Arg	Phe	Tyr	Leu	Phe	Tyr	Asp	Leu	Ser	Thr		320	325	330
Leu	Tyr	Ser	Leu	Thr	Glu	Arg	Val	Lys	Arg	Ile	Thr	Val	Glu	Asn		335	340	345
Ser	Lys	Val	Phe	Leu	Val	Pro	Cys	Leu	Leu	Ser	Gln	His	Leu	Lys		350	355	360



Ser Leu Glu Tyr Leu Asp Leu Ser Glu Asn Leu Met Val Glu Glu  
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 Tyr Leu Lys Asn Ser Ala Cys Glu Asp Ala Trp Pro Ser Leu Gln  
 380 385 390  
 Thr Leu Ile Leu Arg Gln Asn His Leu Ala Ser Leu Glu Lys Thr  
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 Gly Glu Thr Leu Leu Thr Leu Lys Asn Leu Thr Asn Ile Asp Ile  
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 Ser Lys Asn Ser Phe His Ser Met Pro Glu Thr Cys Gln Trp Pro  
 425 430 435  
 Glu Lys Met Lys Tyr Leu Asn Leu Ser Ser Thr Arg Ile His Ser  
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 Val Thr Gly Cys Ile Pro Lys Thr Leu Glu Ile Leu Asp Val Ser  
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 Asn Asn Asn Leu Asn Leu Phe Ser Leu Asn Leu Pro Gln Leu Lys  
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 Glu Leu Tyr Ile Ser Arg Asn Lys Leu Met Thr Leu Pro Asp Ala  
 485 490 495  
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 575 580 585  
 His Arg Thr Ala Leu Val Ser Gly Met Cys Cys Ala Leu Phe Leu  
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 Leu Ile Leu Leu Thr Gly Val Leu Cys His Arg Phe His Gly Leu  
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 620 625 630  
 Pro Arg Lys Ala Pro Ser Arg Asn Ile Cys Tyr Asp Ala Phe Val  
 635 640 645  
 Ser Tyr Ser Glu Arg Asp Ala Tyr Trp Val Glu Asn Leu Met Val  
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 Gln Glu Leu Glu Asn Phe Asn Pro Pro Phe Lys Leu Cys Leu His  
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Asp	Ser	Ile	Glu	Lys	Ser	His	Lys	Thr	Val	Phe	Val	Leu	Ser	Glu
				695					700					705
Asn	Phe	Val	Lys	Ser	Glu	Trp	Cys	Lys	Tyr	Glu	Leu	Asp	Phe	Ser
				710					715					720
His	Phe	Arg	Leu	Phe	Asp	Glu	Asn	Asn	Asp	Ala	Ala	Ile	Leu	Ile
				725					730					735
Leu	Leu	Glu	Pro	Ile	Glu	Lys	Lys	Ala	Ile	Pro	Gln	Arg	Phe	Cys
				740					745					750
Lys	Leu	Arg	Lys	Ile	Met	Asn	Thr	Lys	Thr	Tyr	Leu	Glu	Trp	Pro
				755					760					765
Met	Asp	Glu	Ala	Gln	Arg	Glu	Gly	Phe	Trp	Val	Asn	Leu	Arg	Ala
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Ala	Ile	Lys	Ser											

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				20					25					30
Met	Thr	Asn	Cys	Ser	Asn	Met	Ser	Leu	Arg	Lys	Val	Pro	Ala	Asp
				35					40					45
Leu	Thr	Pro	Ala	Thr	Thr	Thr	Leu	Asp	Leu	Ser	Tyr	Asn	Leu	Leu
				50					55					60
Phe	Gln	Leu	Gln	Ser	Ser	Asp	Phe	His	Ser	Val	Ser	Lys	Leu	Arg
				65					70					75
Val	Leu	Ile	Leu	Cys	His	Asn	Arg	Ile	Gln	Gln	Leu	Asp	Leu	Lys
				80					85					90
Thr	Phe	Glu	Phe	Asn	Lys	Glu	Leu	Arg	Tyr	Leu	Asp	Leu	Ser	Asn
				95					100					105
Asn	Arg	Leu	Lys	Ser	Val	Thr	Trp	Tyr	Leu	Leu	Ala	Gly	Leu	Arg
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Tyr	Leu	Asp	Leu	Ser	Phe	Asn	Asp	Phe	Asp	Thr	Met	Pro	Ile	Cys
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Glu	Glu	Ala	Gly	Asn	Met	Ser	His	Leu	Glu	Ile	Leu	Gly	Leu	Ser
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Gly	Ala	Lys	Ile	Gln	Lys	Ser	Asp	Phe	Gln	Lys	Ile	Ala	His	Leu
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 Glu Glu Gly Ser Leu Pro Ile Leu Asn Thr Thr Lys Leu His Ile  
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